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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Shinya Shirasaki

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EXAMINER

NELSON, LINDSAY ANN

ART UNIT

PAPER NUMBER

1796

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/598,523	Applicant(s) SHIRASAKI ET AL.	
	Examiner LINDSAY FACTEAU	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>06/19/2007, 06/19/2007 and 05/01/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Double Patenting***

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-4, 7, 10-13, 16, and 19-20 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-4, 7, 13-15, 18, and 21 of copending Application No. 10/546746.

Although the conflicting claims are not identical, they are not patentably distinct from each other because copending application claims a method which would result in the composition of instant application.

Instant Claims	Copending Application
1. A silicone rubber sponge emulsion composition, which comprises (A) a liquid silicone rubber base	1. A method of manufacturing a silicone rubber said method comprising: a first stage comprising

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<p>comprising (a-1) a liquid diorganopolysiloxane having at least two alkenyl groups per molecule or (a-1) a liquid diorganopolysiloxane having at least two alkenyl groups per molecule and (a-4) a reinforcing filler, (a-2) an organopolysiloxane having at least two silicon-bonded hydrogen atoms per molecule, and (a-3) a platinum catalyst, (B ~) an aqueous solution of (b-1) a water-soluble polymer, and (C) an emulsifying agent, and in which (a-1) to (a-3) or (a-1) to (a-4) in component (A) form an addition-curable type liquid silicone rubber composition, component (B1) is contained in a proportion ranging from 50 to 250 parts by weight and component (C) is contained in a proportion ranging from 0.1 to 10 parts by weight per 100 parts by weight of the total of (a-1) to (a-3) or the total of (a-1) to (a-4) in component (A).</p>	<p>(1 -1) the step of preparing an aqueous dispersion of a filler composed of 10 to 300 part by weight of water that contains a water-soluble polymer (E), 1 to 40 part by weight a finely powdered silica filler (B), 0 to 500 part by weight of a conductive filler (C), and 0 to 500 part by weight of a non-conductive inorganic filler (D) excluding the finely powdered silica filler, where the total amount of components (B), (C), and (D) is within the range of 1 to 500 part by weight; and (1-2) the step of preparing an aqueous emulsion by stirring and mixing in an arbitrary sequence the aforementioned aqueous dispersion of a filler with the following components: 100 part by weight of an organopolysiloxane (A) that contains in one molecule at least two silicon-bonded alkenyl groups and that has a viscosity of 100 to 500,000 mPa.s at 25' C.; 0.1 to 10 part by weight of an emulsification agent (F); and a curing agent (G); and a second stage for obtaining the silicone rubber, the second stage comprising (2-1) curing the aqueous emulsion prepared in the aforementioned first stage, forming a wet silicone-rubber like cured body, and then removing water from the aforementioned wet siliconerubber like cured body; or dehydrating and curing the aqueous emulsion prepared in the aforementioned first stage.</p>
<p>2. A method for producing the silicone rubber sponge emulsion composition according to claim 1, wherein an addition-curable type liquid silicone rubber composition is prepared by mixing (A) a liquid silicone rubber base made up of (a-1) a liquid diorganopolysiloxane having at least two alkenyl groups per molecule, or (a-1) a liquid diorganopolysiloxane having at least two alkenyl groups per molecule and (a-4) a reinforcing filler, (a-2) an</p>	<p>2. The method of manufacturing a silicone rubber according to claim 1, wherein said step (1-2) is further defined as: the step of preparing an aqueous emulsion by adding 100 part by weight of component (A), 0.1 to 10 part by weight of component (F), and component (G) to the aforementioned aqueous dispersion of the filler and then stirring and mixing the components; or the step of preparing an aqueous emulsion by adding 100 part by weight of component (A) and 0.1 to 10 part by</p>

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<p>organopolysiloxane having at least two silicon-bonded hydrogen atoms per molecule, and (a-3) a platinum catalyst and an emulsion is made by mixing the addition-curable type liquid silicone rubber composition with (B1) an aqueous solution of (b-1) a water-soluble polymer, and (C) an emulsifying agent.</p>	<p>weight of component (F) to the aforementioned dispersion of the filler, stirring and mixing the components, adding to the mixture component (G), and then again stirring and mixing the components.</p>
<p>3. A method for producing the silicone rubber sponge emulsion composition according to claim 1, wherein an emulsion is produced by mixing (A) a liquid silicone rubber base comprising (a-1) a liquid diorganopolysiloxane having at least two alkenyl groups per molecule or (a-1) a liquid diorganopolysiloxane having at least two alkenyl groups per molecule and (a-4) a reinforcing filler, (B1) an aqueous solution of (b-1) a water-soluble polymer, and (C) an emulsifying agent, and the emulsion is mixed with (a-2) an organopolysiloxane having at least two silicon-bonded hydrogen atoms per molecule and (a-3) a platinum catalyst.</p>	<p>3. A method of manufacturing a silicone rubber, said method comprising: a first stage comprising (3-1) the step of preparing an aqueous dispersion of a filler composed of 10 to 300 part by weight of water that contains a water-soluble polymer (E), 1 to 40 part by weight a finely powdered silica filler (B), 0 to 500 part by weight of a conductive filler (C), and 0 to 500 part by weight of a non-conductive inorganic filler (D) excluding the finely powdered silica filler, where the total amount of components (B), (C), and (D) is within the range of 1 to 500 part by weight, and 0.1 to 10 part by weight of an emulsification agent (F); and (3-2) the step of preparing an aqueous emulsion by stirring and mixing in an arbitrary sequence the aforementioned aqueous dispersion of a filler with the following components: 100 part by weight of an organopolysiloxane (A) that contains in one molecule at least two silicon-bonded alkenyl groups and that has a viscosity of 100 to 500,000 mPa.s at 25' C.; and a curing agent (G); and a second stage for obtaining the silicone rubber, the second stage comprising (2-1) curing the aqueous emulsion prepared in the aforementioned first stage, forming a wet silicone-rubber like cured body, and then removing water from the aforementioned wet siliconerubber like cured body; or (2-2) dehydrating and curing the aqueous emulsion prepared in the aforementioned first stage.</p>

<p>4. A silicone rubber sponge emulsion composition, which comprises (A) a liquid silicone rubber base comprising (a-1) a liquid diorganopolysiloxane having at least two alkenyl groups per molecule or (a-1) a liquid diorganopolysiloxane having at least two alkenyl groups per molecule and (a-4) a reinforcing filler, (a-2) an organopolysiloxane having at least two silicon-bonded hydrogen atoms per molecule, (a-3) a platinum catalyst, (B2) an aqueous solution of (b-1) a water-soluble polymer and (C) an emulsifying agent, and in which (a-1) to (a-3) or (a-1) to (a-4) in component (A) form an addition-curable type liquid silicone rubber composition, component (b-1) and water are contained in a proportion ranging from 10 to 250 parts by weight and component (C) is contained in a proportion ranging from 0.1 to 10 parts by weight per 100 parts by weight of the total of (a-1) to (a-3) or the total of (a-1) to (a-4) in component (A).</p>	<p>4. The method of manufacturing a silicone rubber according to claim 1, wherein said water-soluble polymer that is contained in component (E) is added in the amount of 0.1 to 5 wt. %.</p>
<p>7. The silicone rubber sponge emulsion composition according to claim 1, wherein component (b-1) is contained in component (B1) in an amount of 0.1 to 5% by weight.</p>	<p>7. The method of manufacturing a silicone rubber according to claim 1, wherein the aqueous emulsion produced in the first stage is cured after deaeration.</p>
<p>10. The method for producing a silicone rubber sponge emulsion composition according to claim 2, wherein component (b-1) is contained in component (B1) or component (B2) in an amount of 0.1 to 5% by weight.</p>	<p>13. A method of preparing an aqueous emulsion for use in the production of a silicone rubber, said method comprising: (1 -1) the step of preparing an aqueous dispersion of a filler composed of 10 to 300 part by weight of water that contains a water-soluble polymer (E), 1 to 40 part by weight a finely powdered silica filler (B), 0 to 500 part by weight of a conductive filler (C), and 0 to 500 part by weight of a non-conductive inorganic filler (D)</p>

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	<p>excluding the finely powdered silica filler, where the total amount of components (B), (C), and (D) is within the range of 1 to 500 part by weight; and (1-2) the step of preparing an aqueous emulsion by stirring and mixing in an arbitrary sequence the aforementioned aqueous dispersion of a filler with the following components: 100 part by weight of an organopolysiloxane (A) that contains in one molecule at least two silicon-bonded alkenyl groups and that has a viscosity of 100 to 500,000 mPa.s at 25' C.; 0.1 to 10 part by weight of an emulsification agent (F); and a curing agent (G).</p>
<p>11. A method for producing a silicone rubber sponge, wherein the silicone rubber sponge is obtained by forming a moist silicone rubber-like molding by curing the silicone rubber sponge emulsion composition according to claim 1 and then evaporating water from the molding by heating.</p>	<p>14. A method of preparing an aqueous emulsion for use in the production of a silicone rubber, said method comprising: (3-1) the step of preparing an aqueous dispersion of a filler composed of 10 to 300 part by weight of water that contains a water-soluble polymer (E), 1 to 40 part by weight a finely powdered silica filler (B), 0 to 500 part by weight of a conductive filler (C), 0 to 500 part by weight of a non-conductive inorganic filler (D) excluding the finely powdered silica filler, where the total amount of components (B), (C), and (D) is within the range of 1 to 500 part by weight, and 0.1 to 10 part by weight of an emulsification agent (F); and (3-2) the step of preparing an aqueous emulsion by stirring and mixing in an arbitrary sequence the aforementioned aqueous dispersion of a filler with the following components: 100 part by weight of an organopolysiloxane (A) that contains in one molecule at least two silicon-bonded alkenyl groups and that has a viscosity of 100 to 500,000 mPa.s at 25' C.; and a curing agent (G).</p>
<p>12. The method for producing a silicone rubber sponge according to claim 11, wherein the silicone rubber</p>	<p>15. The method of preparing an aqueous emulsion for use in the production of a silicone rubber according to</p>

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sponge emulsion composition is cured at a temperature between room temperature and less than 120° C. and the cured product is heated at 120° C. to 250° C.	claim 13, wherein said water-soluble polymer that is contained in component (E) is added in the amount of 0.1 to 5 wt. %.
13. The method for producing a silicone rubber sponge according to claim 11, wherein the silicone rubber sponge emulsion composition does not contain air bubbles.	18. The method of manufacturing a silicone rubber according to claim 3, wherein said water-soluble polymer that is contained in component (E) is added in the amount of 0.1 to 5 wt. %.
16. The silicone rubber sponge emulsion composition according to claim 4, wherein component (b-1) is contained in component (B2) in an amount of 0.1 to 5% by weight.	21. The method of manufacturing a silicone rubber according to claim 3, wherein the aqueous emulsion produced in the first stage is cured after deaeration.
19. The method for producing a silicone rubber sponge emulsion composition according to claim 3, wherein component (b-1) is contained in component (B1) or component (B2) in an amount of 0.1 to 5% by weight.	
20. A method for producing a silicone rubber sponge, wherein the silicone rubber sponge is obtained by forming a moist silicone rubber-like molding by curing the silicone rubber sponge emulsion composition according to claim 4 and then evaporating water from the molding by heating.	

3. While the claims of the copending application do not specifically show the composition of instant claims, it would be obvious to one skilled in the art at the time of the invention that, because they are prepared by substantially similar methods, they would result in the same composition. Furthermore, the claims of

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compending application do not mention heating the composition post-curing, but do mention a dehydrating process.

4. Applicant's attention is drawn to MPEP 804 where it is disclosed that "the specification can always be used as a dictionary to learn the meaning of a term in a patent claim." *In re Boylan*, 392 F.2d 1017, 157 USPQ 370 (CCPA 1968).

Further, those portions of the specification which provide support for the patent claims may also be examined and considered when addressing the issue of whether a claim in an application defines an obvious variation of an invention claimed in the patent. (underlining added by examiner for emphasis) *In re Vogel*, 422 F.2d 438, 164 USPQ 619, 622 (CCPA 1970).

5. Consistent with the above underlined portion of the MPEP citation, attention is drawn to paragraph [0028] wherein compending application further discloses that the dehydration process is done via a heat treatment from 100 to 250° C wherein one skilled in the art would realize that heating between this is substantially similar to the range in instant claims.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

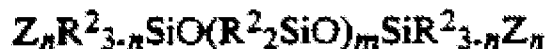
A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-12 and 14-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Maschberger et al, US Patent 5,332,762 (hereinafter Maschberger).

8. Regarding claims 1-4, Maschberger discloses a composition for forming an elastomeric silicone foam comprising (A) a blowing agent which comprises aqueous emulsions containing organopolysiloxanes, emulsifiers, water, and thickeners, (B) diorganopolysiloxanes, (C) crosslinking agents, and, if appropriate, (D) crosslinking catalysts and (E) fillers (abstract). The organopolysiloxane (B) in the composition is of the formula



(column 5, lines 15-20) wherein n has a value of 0 when the compositions are curable by adding Si-bonded hydrogen onto Si-bonded alkenyl groups, and at least two of the R² radicals must be alkenyl radicals, which are preferably vinyl radicals (column 6, lines 12-17) which reads on instant (a-1). The thickener used is in water. Examples are given such as polyacrylic acids and cellulose ethers such as carboxymethylcellulose (column 4, lines 40 – 61), which are suitable water-soluble polymers according to instant specification. Furthermore, Maschberger discloses that the water may be up to 80% by weight, and the thickener up to 40% by weight, which falls within the claimed range and reads on (B) and (b-1) (column 5, lines 1-8). The catalysts (D) are preferably platinum metal catalysts (column 7, lines 26-30) which reads on (a-3). The crosslinking

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agent (C) is an organopolysiloxane which contains at least 2, preferably 3, or more hydrogen atoms per molecule (column 6 line 57- column 7 line 5) which reads on instant (a-2). The emulsifiers of the composition are contained from 1-7% by weight (column 5, lines 3-5) which reads on instant (C). Furthermore, Example 6 shows the process for making the composition consists of mixing all of the components of the composition.

9. Regarding claims 5-6, 8-9, 14-15, and 17-18, Maschberger further discloses that the emulsifiers are nonionic emulsifiers such as fatty alcohol polyglycol ethers or polyvinyl alcohols (column 4, lines 30-32). Maschberger also discloses examples of the thickener, or water-soluble polymer, as polyacrylic acids and cellulose ethers, both of which are acceptable water-soluble polymers as disclosed by the instant specification, and would not give unexpected results, and are thus deemed anticipatory over the claimed composition.

10. Regarding claims 7, 10, 16, and 19, Maschberger further discloses that the blowing agent comprises 10-50% by weight of an organopolysiloxane, 1-7% by weight of an emulsifier, 20-80% by weight water (which, combined, make up the aqueous portion of the composition), and, preferably, 10 to 20% by weight of a thickener (or instant (b-1)) which, when all of the compositions comprise the least amount, contain 4.1% of the thickener which reads on the claimed composition.

11. Regarding claims 11-12 and 20, Maschberger discloses, in Example 6, that the mixed composition is extruded into a foam tube and then further vulcanized at 200° C. Furthermore, the process of simultaneously heating and

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curing, as disclosed by the instant specification, is substantially similar to the curing process of Maschberger and would not give unexpected results, and is thus deemed anticipatory over the claimed curing process.

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

14. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maschberger as applied to claims 1 and 11 above, and further in view of Peoples, US Patent 4,876,805 (hereinafter Peoples).

15. Regarding claim 13, Maschberger discloses the above composition and the above method, but fails to disclose the process of degassing the composition to remove air bubbles.

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16. Peoples discloses an foam cushioning for a shoe (abstract). Furthermore, Peoples discloses degassing the composition before mixing, while mixing, and also before curing (Polymer Preparation, Column 11, lines 10 - 25). Therefore, it would be obvious to one skilled in the art at the time of the invention to have degassed the composition of Maschberger for the benefit of further increasing the properties of the cushions and foamed mats prepared by the process.

17. The International Search Report makes reference to Bauman et al, US Patent 4,559,369. While the composition is similar to that of instant claims, it does not appear to contain the necessary parts by weight. Also, curing occurs before the addition of the filler.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LINDSAY NELSON whose telephone number is (571)270-7735. The examiner can normally be reached on Monday - Thursday, 9 am - 5 pm est.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LN

/Randy Gulakowski/
Supervisory Patent Examiner, Art Unit 1796